DETAILED ACTION

Examiner's Amendments

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this Examiner's amendment was given in a telephonic interview/email exchange with Benjamin P. Tabor (USPTO Registration No. 60,741) on or about August 30, 2011.

3. The application has been amended as follows:

1-28. (Canceled)

29. (Currently Amended) A method in a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record, the method comprising the steps of:

accessing medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures;

selecting a list of medications from the medication-procedure tables that are to be administered to the person for a medical procedure

scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure, wherein the medical procedure includes any medical procedure requiring the use of anesthesia;

employing a control server to compare the medication list directly against information extracted from the person's electronic medical record (EMR), wherein the extracted information includes a weight and an age of the person;

determining that at least one match exists between any of the selected medications included in the medication list and the EMR information, wherein the match indicates the potential of drug-allergy reactions occurring upon the selected medication being administered to the person;

generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure; and

outputting a response to a window on a display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for each match is presented as

a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity.

30. (Original) The method of claim 29, wherein the at least one medication is to be administered to the person prior to or during a medical procedure, and wherein the medication list includes a universal set of medications that may be administered regardless of the type of medical procedure.

31. (Previously Presented) The method of claim 29, further comprising, based on the determinations, selecting an atypical clinical event from the group consisting of a drug-drug interaction, drug-food interaction, a drug-allergy interaction, and a drug-gene interaction.

32. (Canceled)

33. (Previously Presented) The method of claim 29, wherein the information in the person's EMR includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed, the person's allergies to medications and genetic test information for the person.

34. (Previously Presented) The method of claim 31, wherein the response includes a listing of the match and the associated atypical clinical event.

35-47. (Canceled)

48. (Currently Amended) A computing system for preemptively determining the potential for atypical clinical event occurrence related to the administering of a medication to a person having an electronic medical record (EMR), the computer system comprising a processing device coupled to a computer storage medium, the computer storage medium having stored thereon a plurality of program components executable by the processing device, the program components comprising:

an accessing component that accesses medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures, and that selects a list of medications from the medication-procedure tables that are to be administered to the person for a medical procedure scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure, wherein the medical procedure includes any medical procedure requiring the use of anesthesia;

a comparing component for comparing the medication list ~~to~~ directly against information extracted from the person's electronic medical record (EMR), wherein the extracted information includes a weight and an age of the person;

a determining component that determines that a match exists between any of the selected medications included in the medication list and the EMR information, wherein the match indicates the potential of

drug-allergy reactions occurring upon the selected medication being administered to the person;

an outputting component that performs the operations comprising:

(a) generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure; and

(b) outputting a response to a window on a display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for each match is presented as a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity.

49. (Previously Presented) The computing system of claim 48, wherein the determining component is further configured to select an atypical clinical event from the group consisting of a drug-drug interaction, drug-food interaction, drug-allergy interaction and a drug-gene interaction.

50. (Original) The computing system of claim 48, wherein the list of possible medications received includes medications used in a medical procedure involving anesthesia.

51. (Previously Presented) The computing system of claim 48, further comprising a retrieving component that retrieves a specific person's EMR from a unified healthcare system, and wherein information in the EMR includes a list selected from one of the groups consisting of medications the person is currently taking or has recently taken, foods the person has consumed the person's allergies to medications and genetic test information for the person.

52. (Previously Presented) The computing system of claim 49, wherein the outputting component includes a display component that displays the outputted response as a listing of at least one of the matches and the associated atypical clinical event.

53. (Original) The computing system of claim 52, wherein the list of possible medications received includes a dosage amount for each medication in the list, and wherein the outputted response further includes an indication of the predicted severity of the atypical clinical event.

54. (Original) The computing system of claim 52, further comprising a selecting component for selecting a medication of the list of possible medications that is involved in the match, and wherein the display component displays information about the selected medication.

55. (Original) The computing system of claim 48, wherein the receiving component receives the list of possible medications to be administered over a communication network from a remote computing device.

56. (Canceled).

57-72. (Canceled)

73. (Currently Amended) Non-transitory computer ~~Computer~~ storage media containing computer-executable instructions that, when executed, perform a method for controlling a computing system for preemptive determination of the potential for atypical clinical event occurrence related to the administering of at least one medication to a person having an electronic medical record (EMR), the method comprising the steps of:

accessing medication-procedure tables that maintain specific sets of medications and dosages thereof that are administered for each of a plurality of medical procedures;

selecting a list of medications from the medication-procedure tables that are to be administered to the person for a medical procedure scheduled for the person, wherein the medication list includes a specific set of medications and dosages thereof that correspond to the medical procedure, wherein the medical procedure includes any medical procedure requiring the use of anesthesia;

comparing the medication list ~~to~~ directly against information ~~in~~ extracted from the person's electronic medical record (EMR), wherein the extracted information includes a weight and an age of the person;

determining that at least one match exists between any of the selected medications included in the medication list and the [[(]]EMR[[)]] information, wherein the match indicates the potential of drug-allergy reactions occurring upon the selected medication being administered to the person;

generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure; and

outputting a response to a window on a display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for each match is presented as a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity.

Reasons for Allowance

4. The following is an Examiner's Statement of Reasons for Allowance: The prior art taken alone or in combination failed to teach or suggest a method and system of determining

potential allergic reactions of patients to drugs used for specific medical procedures, wherein the medical procedure includes any medical procedure requiring the use of anesthesia, generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure, and outputting a response to a window on a display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for each match is presented as a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity, as recited in independent claims 29, 48, and 73, in combination with the other recited features of the claims.

5. The closest prior art found during extensive searching was Haq (US 2002/0095313 A1) which discloses a system that a physician uses to check a prescription against patient information and other resources to determine adverse medication interactions, wherein alarms are displayed, a red alarm signifying the potential for a major adverse effect, and a yellow alarm signifying the potential for a minor adverse effect (see paragraphs 0054, 0061, 0063, 0064, 0071, and 0112). Haq however fails to teach or suggest a method and system of determining potential allergic reactions of patients to drugs used for specific medical procedures, wherein the medical procedure includes any medical procedure requiring the use of anesthesia, generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure, and outputting a response to a window on a

display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for each match is presented as a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity. Moreover, the missing claimed elements from Hildebrand are not found in a reasonable number of references. Yet even if the missing claimed elements were found in a reasonable number of references, a person of ordinary skill in the art would ***not*** have been motivated to include these missing elements in an embodiment in the Haq disclosure because it is not an obvious variation of Haq to check for allergic reactions to drugs used for procedures involving anesthesia and provide alert boxes for each match where the predicted allergic severity is represented by a graphic sign representing three different levels of severity. Therefore, these features are not obvious because none of the prior art teaches or suggests a method and system of determining potential allergic reactions of patients to drugs used for specific medical procedures, wherein the medical procedure includes any medical procedure requiring the use of anesthesia, generating an alert box for each match, wherein the alert box includes an indication of the selected medication from the medication list that is involved in the match and a predicted severity of adverse affects that result from administering the matching selected medication, wherein the predicted severity is based on the dosage of the selected matching medication, and the age and the weight of the person receiving the medical procedure, and outputting a response to a window on a display device, wherein the response includes presenting the alert box for each match within the window, and wherein the predicted severity for each match is presented as a graphical symbol that represents at least one of mild severity, moderate severity, or severe severity, as recited in independent claims 29, 48, and 73, in combination with the other recited features of the claims.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany

the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **JOSEPH BURGESS** whose telephone number is **(571)270-5547.** The Examiner can normally be reached on Monday-Friday, 9:00am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **ROBERT MORGAN** can be reached at (**571)272-6773**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair . Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (**866)217-9197** (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to **571-273-8300**. Hand delivered responses should be brought to the **United States Patent and Trademark Office Customer Service Window**:

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Alexandria, VA 22314.

/J.B./

Examiner, Art Unit 3626

/C. Luke Gilligan/

Primary Examiner, Art Unit 3626